

PARALLEL PROCESSOR LANGUAGE, METHOD FOR TRANSLATING C++
PROGRAMS INTO THIS LANGUAGE, AND METHOD FOR OPTIMIZING
EXECUTION TIME OF PARALLEL PROCESSOR PROGRAMS

ABSTRACT

The present invention is directed to a parallel processor language, a method for translating C++ programs into a parallel processor language, and a method for optimizing execution time of a parallel processor program. In an exemplary aspect of the present invention, a parallel processor program for defining a processor integrated circuit includes a plurality of processor commands with addresses. The plurality of processor commands may includes a starting processor command, and each of the plurality of processor commands includes one or more subcommands. When the processor integrated circuit executes the parallel processor program, the processor integrated circuit executes the starting processor command first and then executes the rest of the plurality of processor commands based on an order of the addresses. Moreover, when the processor integrated circuit executes a parallel processor command, the processor integrated circuit executes all subcommands included in the parallel processor command in parallel in one clock cycle.